VERSION SHOWING MARKED CHANGES TO THE APPLICATION

IN THE CLAIMS

1. (CANCEL)

2. (CANCEL)

3. (CANCEL)

4. (CANCEL)

5. (CANCEL)

6. (CANCEL)

7. A process for underfilling an integrated circuit that is mounted to a substrate, comprising:

dispensing a first underfill material which becomes attached to the integrated circuit and the substrate; and,

dispensing a second underfill material which become attached to the integrated circuit and the substrate.

8. (Amended) The process as recited in claim 11 [7], wherein the first underfill material flows between the integrated circuit and the substrate.

9. (Amended) The [A] process as recited in claim 8, wherein the substrate moves within an oven while the first underfill material flows between the integrated circuit and the substrate.

10. (Amended) The process as recited in claim 11 [7], wherein the second underfill material is dispensed in a pattern which surrounds the first underfill material.

11. (Amended) A [The] process [as recited in claim 7, further comprising the step of] for underfilling an integrated circuit that is mounted to a substrate comprising:

heating the substrate before a [the] first underfill material is dispensed;

dispensing the first underfill material which becomes attached to the integrated circuit and the substrate; and,

dispensing a second underfill material which become attached to the integrated circuit and the substrate.

12. (Amended) The process as recited in claim 11, further comprising [the step of] heating the first underfill material to a partial gel state.

13. (Amended) The process as recited in claim 12, wherein the substrate is heated to a temperature that is greater than a temperature for heating [of] said [partially gelled] first underfill material to said partially gel state.

14. (Amended) The process as recited in claim 11 [7], further comprising [the step of] mounting the integrated circuit to the substrate with a solder bump before the first underfill material is dispensed.

15. (Amended) A process for mounting and underfilling an integrated circuit to a substrate, comprising:

baking the substrate;

mounting an integrated circuit to the substrate;

dispensing a first underfill material onto the substrate, [wherein] the first underfill material flows between the integrated circuit and the substrate while the substrate moves through an oven; and,

dispensing a second underfill material around the first underfill material.

16. (Amended) The process as recited in claim 15, further comprising [the step of] mounting the integrated circuit to the substrate with a solder bump before the first underfill material is dispensed.

17. (New) The process as recited in claim 15, wherein the baking of said substrate occurs before said first underfill material is dispensed.

18. (New) The process as recited in claim 15, wherein prior to dispensing the second underfill material, the method further comprises heating the first underfill material to a partial gel state.

19. (New) The process as recited in claim 18, wherein the substrate is baked at a temperature that is greater than a temperature for heating said first underfill material to said partially gel state.

20. (New) The process as recited in claim 19, wherein said temperature for heating said first underfill material to said partially gel state is greater than a temperature at which said second underfill material is dispensed.

21. (New) The process as recited in claim 13, wherein said temperature for heating said first underfill material to said partially gel state is greater than a temperature at which said second underfill material is dispensed.

22. (New) A process for mounting and underfilling an integrated circuit to a substrate, comprising:

heating the substrate to a first temperature;

mounting an integrated circuit to the substrate;

dispensing a first underfill material onto the substrate and heating the first underfill material to a second temperature in which the first underfill material is in a partial gel state and flows between the integrated circuit and the substrate while the substrate moves through an oven; and,

dispensing a second underfill material around the first underfill material.

23. (New) The process as recited in claim 22, further comprising mounting the integrated circuit to the substrate with a solder bump before the first underfill material is dispensed.

24. (New) The process as recited in claim 22, wherein the first temperature is greater than the second temperature.

25. (New) The process as recited in claim 24, wherein the second temperature is greater than a temperature at which the second underfill material is dispensed.

CONCLUSION

In view of the foregoing, Applicants respectfully request examination of the pending claims. Examination of these claims at Examiner's earliest convenience is respectfully solicited.

Respectfully submitted,

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Dated: June 5, 2001

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on: June 5, 2001.

Corrinn R. Reynolds 06/5/01